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Onsite Systems – State developing regulations – An *onsite wastewater treatment system* (OWTS) is an individual or community sewage treatment system with a subsurface discharge. This category includes septic tanks/leach fields and similar systems. Generally, these systems provide sewage treatment for locations that cannot connect to an existing sanitary sewer system and which consequently have to treat and dispose of their own wastewater.

In 1997 the State Water Resources Control Board issued Water Quality Order 97-10-DWQ, *General Waste Discharge Requirements for Discharges to Land by Small Domestic Wastewater Systems*. This general WDR could be used at the discretion of the Regional Boards for small systems that discharge to land (e.g., septic tanks, treatment ponds) and therefore did not need NPDES permits. The 1997 general WDR was established to streamline the permitting process associated with these small wastewater systems. Previously, OWTS permitting had been handled mostly at the local level (e.g., county health). In 2000, a new law - AB 885 - went a step further by requiring the SWRCB to adopt statewide regulations or standards for the permitting of OWTS. The law was specifically designed to target new and failing septic systems.

Preliminary drafts of the regulations have been very controversial. The first formal public draft will be circulated later this year but most of the review and hearings will take place next year. The regulations may include performance standards similar to those for wastewater treatment plants discharging to waters of the U.S. For example, the current draft proposes that alternative treatment systems meet a BOD standard of 30 mg/l. (BOD is a measure of oxygen-demanding substances.) The proposed suspended solids standard is also 30 mg/l. The regulations also would require that systems not exceed 10 mg/l nitrate (as nitrogen) either at the effluent pipe or from a sample taken in the ground below the OWTS . Pathogen reduction would be required at sites where the soils drain excessively fast or where there is a known OWTS pathogen problem. An unresolved question is whether the requirements will be implemented through the issuance of waste discharge requirements (WDRs) or by some other regulatory mechanism.

The new regulations will not affect underground disposal facilities for stormwater unless sewage is also involved. However, the Department does operate a number of onsite systems, for example at remote maintenance facilities and at rest areas. These are currently permitted by county health departments or by WDRs issued by Regional Boards. For more information and a recent preliminary draft of the regulations go to *California Onsite Wastewater Assoc*. http://www.cowa.org/ or call the SWRCB contact: Todd Thompson at (916) 341-5518. U.S. EPA also provides a helpful septic system site which includes a design manual. http://cfpub.epa.gov/owm/septic/home.cfm

Pesticides and Frogs – Less is more – Recent studies have shown that some pesticides are more toxic to developing frogs at low doses than they are at higher doses. For example, atrazine, the most commonly used weed killer in the U.S., was more toxic to tadpoles at a concentration of 3 parts per billion, the drinking water standard, than was exposure to doses of 30 or 100 ppb. Other hormonally active pollutants have shown similar counterintuitive results. Article: http://ehp.niehs.nih.gov/members/2004/6821/6821.html

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